

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference HM 0036 PCT/Kr/H	FOR FURTHER ACTION		see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/EP2004/006537	International filing date (day/month/year) 16/06/2004	(Earliest) Priority Date (day/month/year) 18/06/2003	
Applicant HILLE & MÜLLER GMBH			

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (See Box II).

3. **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. _____

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

- b. none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/006537

A. CLASSIFICATION OF SUBJECT MATTER	IPC 7	B21C37/06	B21C37/09	B21C37/15	B23K35/30	F16L9/16
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B21C B23K F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 553 640 A (FERENCZY NIKOLAUS ET AL) 10 September 1996 (1996-09-10) cited in the application column 2, line 30 – line 67 column 3, line 15 – line 44 column 3, line 52 – column 4, line 33 claim 1 ----- US 6 413 651 B1 (MENG QINGLIAN ET AL) 2 July 2002 (2002-07-02) column 3, line 24 – line 66 column 5, line 8 – line 37 examples 2,3; table 1 claims 1,4 ----- -/--	1-22
Y		1-22

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

4 October 2004

Date of mailing of the international search report

18/10/2004

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INTERNATIONAL SEARCH REPORT

International Application No PCT/EP2004/006537

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 522 331 A (LIEBERMANN HOWARD H ET AL) 11 June 1985 (1985-06-11) column 2, line 50 – line 60 examples 2,3; tables 1,2 claims 1,2 -----	1-22
A	EP 1 181 993 A (TI GROUP AUTOMOTIVE SYSTEMS LT) 27 February 2002 (2002-02-27) paragraph '0013! claims 1-7 -----	1-22
A	GB 2 034 206 A (MECANO BUNDY GMBH) 4 June 1980 (1980-06-04) claims 1-7 -----	1-22
A	EP 0 546 790 A (BUNDY INT LTD) 16 June 1993 (1993-06-16) claims 1,2 -----	1-22
A	EP 0 449 600 A (BUNDY GMBH) 2 October 1991 (1991-10-02) column 2, line 1 – line 29 column 3, line 31 – line 37 claims 1,8-11 -----	1-22

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/EP2004/006537	
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Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 5553640	A	10-09-1996	DE 4221167 A1 AT 163996 T DE 59209228 D1 EP 0576733 A1 ES 2113914 T3 JP 3336468 B2 JP 6063731 A ZA 9301518 A	05-01-1994 15-03-1998 16-04-1998 05-01-1994 16-05-1998 21-10-2002 08-03-1994 27-09-1993
US 6413651	B1	02-07-2002	WO 0105585 A1 AU 4894699 A	25-01-2001 05-02-2001
US 4522331	A	11-06-1985	CA 1223759 A1 DE 3476977 D1 EP 0128356 A2 JP 1493897 C JP 60009846 A JP 63040857 B	07-07-1987 13-04-1989 19-12-1984 20-04-1989 18-01-1985 12-08-1988
EP 1181993	A	27-02-2002	EP 1181993 A1 EP 1433544 A1 JP 2002105689 A US 2003038161 A1 US 2002092891 A1	27-02-2002 30-06-2004 10-04-2002 27-02-2003 18-07-2002
GB 2034206	A	04-06-1980	DE 2839684 B1 FR 2435295 A1 IT 1123555 B JP 55048420 A	15-11-1979 04-04-1980 30-04-1986 07-04-1980
EP 0546790	A	16-06-1993	BE 1005554 A3 AT 136824 T BR 9204954 A CA 2084859 A1 CN 1074162 A ,B DE 69209991 D1 DE 69209991 T2 EP 0546790 A1 GB 2262460 A ,B JP 3280096 B2 JP 5245534 A US 5297410 A	26-10-1993 15-05-1996 15-06-1993 11-06-1993 14-07-1993 23-05-1996 12-09-1996 16-06-1993 23-06-1993 30-04-2002 24-09-1993 29-03-1994
EP 0449600	A	02-10-1991	DE 4010178 C1 BR 9101253 A CA 2039407 A1 EP 0449600 A2 GB 2242498 A JP 5104134 A	13-06-1991 05-11-1991 01-10-1991 02-10-1991 02-10-1991 27-04-1993